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Ogawa

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[54] **OPTICAL POSITION DETECTING UNIT AND OPTICAL COORDINATE INPUT UNIT**

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[52] **U.S. Cl.** **348/207**; 348/141; 345/180

[58] **Field of Search** 348/744, 61, 15, 348/143, 141, 169, 207; 345/145, 157, 158, 180, 181, 179

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[57] **ABSTRACT**

An optical position detecting unit which includes: an image pickup device having a pixel array region, an imaging lens for forming an image of a light-emitting point, a converging lens for converging light come from the light-emitting point image formed by the imaging lens onto the pixel array region, a pattern member having a pattern which contains code information uniquely corresponding to the position of the light-emitting point and disposed on a path of light from the light-emitting point and at a position near the light-emitting point image, and a signal processing unit for extracting information of the position of the light-emitting point by using code information contained in an image of the pattern projected onto the pixel array region of the image pickup device on the basis of image data generated by the image of the projected pattern.

24 Claims, 8 Drawing Sheets